What is claimed is:

1.   1.   A method of communications, comprising:

2   determining one of plural rates to code data for communication over a

3   network;

4   encapsulating the data in a packet having a quality-of-service indicator

5   field; and

6   setting one of plural values for the quality-of-service indicator field based

7   on the determined one of plural rates.

1.   2.   The method of claim 1, further comprising:

2   setting a first value for the quality-of-service indicator field if a first rate is

3   determined; and

4   setting a second value for the quality-of-service indicator field if a second

5   rate is determined.

1.   3.   The method of claim 1, wherein determining one of plural rates comprises

2   determining one of plural rates of an adaptive multi-rate codec.

1.   4.   The method of claim 1, further comprising transmitting the packet over a

2   wireless link.

1.   5.   The method of claim 1, wherein encapsulating the data in the packet

2   comprises encapsulating the data in an Internet Protocol packet.

1.   6.   The method of claim 5, wherein setting one of plural values for the

2   quality-of-service indicator field comprises setting one of plural values for a

3   differentiated services field.

1.   7.   The method of claim 1, wherein determining one of plural rates to code

2   data comprises determining one of plural rates to code real-time data.

1   8.   The method of claim 1, wherein determining one of plural rates to code

2   data comprises determining one of plural rates to code audio data.

1   9.   An article comprising at least one storage medium comprising instructions

2   that when executed cause a system to:

3   determine one of plural rates to code data for communication over a

4   network; and

5   set one of plural quality-of-service values in a packet, based on the

6   determined one rate, to carry the data over the network.

1   10.   The article of claim 9, wherein the instructions when executed cause the

2   system to determine one of plural rates by determining one of plural rates of an adaptive

3   multi-rate codec.

1   11.   The article of claim 9, wherein the instructions when executed cause the

2   system to set one of the plural quality-of-service values by setting one of plural

3   differentiated services field values.

1   12.   The article for claim 11, wherein the instructions when executed cause the

2   system to set the one of plural differentiated services field values in an Internet Protocol

3   packet.

1   13.   The article of claim 9, wherein the instructions when executed cause the

2   system to set one of the plural quality-of-service values by setting one of plural

3   differentiated services code points.

1   14.   The article of claim 9, wherein the instructions when executed cause the

2   system to determine one of plural rates to code one of audio data and video data.

1   15.   A system comprising:

2   a codec adapted to code real-time data; and

3   a controller adapted to vary a codec rate and to set one of plural quality-of-

4   service indicator values based on the codec rate.

1   16.   The system of claim 15, further comprising an interface to a wireless link.

1   17.   The system of claim 15, wherein the codec comprises an adaptive multi-

2   rate codec.

1   18.   The system of claim 15, wherein the controller comprises application

2   software to set the one of plural quality-of-service indicators.

1   19.   The system of claim 18, further comprising a network layer to encapsulate

2   the data in a packet to carry the one quality-of-service indicator value.

1   20.   The system of claim 19, wherein the network layer comprises an Internet

2   Protocol layer.

1   21.   The system of claim 15, further comprising a Real-Time Protocol module

2   adapted to encapsulate the real-time data in a Real-Time Protocol packet.

1   22.   The system of claim 15, wherein the controller is adapted to set one of

2   plural quality-of-service indicator values by setting one of plural differentiated services

3   code points.

1   23.   A system comprising:

2   a network interface to receive plural units of data from a network;

3   a plurality of queues to store the units of data, each unit of data containing

4   a quality-of-service indicator, the plural units of data containing different quality-of-

5   service indicator values that correspond to different coding rates; and

6   a controller adapted to store each unit of data in one of the plurality of

7   queues based on the quality-of-service indicator value in the unit of data.

1   24.   The system of claim 23, wherein the units of data contain conversational

2   data.

1   25.   The system of claim 23, wherein the coding rates comprise rates of an

2   adaptive multi-rate codec.

1   26.   The system of claim 23, wherein the quality-of-service indicator values

2   comprise differentiated services code points.